



Northeast Temperate Network

Protecting the future of the National Parks through Resource Inventories and Monitoring

The Inventory and Monitoring Program designs and implements ecological monitoring programs to provide critical information to the National Parks and the public about the integrity of landscapes, ecosystems, and species.

“to conserve the scenery and the natural and historic objects and the wild life therein...for the enjoyment of future generations”

-Organic Act 1916

Knowing the condition of natural resources in national parks is fundamental to the Service’s ability to manage park resources. For years, managers and scientists have sought a way to characterize and determine trends in the condition of parks and other protected areas to provide early warning of impending threats and to assess the efficacy of management practices and restoration efforts. The challenge of protecting and managing a park’s natural resources requires a partnership based, ecosystem approach because most parks are open systems, with threats such as air and water pollution, and invasive species, originating outside of park boundaries. Natural resource monitoring provides site-specific information needed to understand and identify change in complex, variable, and imperfectly understood natural systems and to determine whether observed changes are within natural levels of variability.



Emily Sloan

Marsh-Billings-Rockefeller NHP

The Natural Resource Challenge

The National Park Service is undergoing a comprehensive inventory and monitoring effort for 270 park units under the Natural Resource Challenge Program. Parks within this program were organized into 32 "Networks" of parks where core professional staff are shared to design and conduct inventory and monitoring programs. Inventories produce the "core" or baseline information that park managers need to effectively manage and protect park resources. Each park in the Inventory and Monitoring program will receive information on the following baseline inventories:

Bibliographic Database
Base Cartography
Species Lists: vascular plants & vertebrates
Species Distribution
Vegetation Map
Soils Map
Geologic Map
Water Resources and Chemistry
Air Quality and Meteorology

The Northeast Temperate Network contains 11 parks with diverse cultural and natural resources. Parks in the Network range from Acadia NP in coastal Maine to Morristown NHP in central New Jersey, a diverse region where 61 ecological systems have been identified. Parks in the Northeast Temperate Network, most of which were established for cultural resources, are relatively small in size and located in increasingly urbanizing landscapes.

Staff from the Northeast Temperate Network are working with park staff and regional scientists to identify priority natural resources and threats to those resources, and to design and implement a long-term monitoring program to measure key indicators of ecological integrity, or "Vital Signs" over time. Early detection of potential problems allows park managers to take steps to mitigate threats to the ecological health of park resources before serious, irreparable damage occurs. Park Vital Signs Monitoring is a cornerstone of effective park management, providing managers with scientifically sound information needed to safeguard the health and integrity of our national parks.

Diversity in the Northeast: The unique combination of



Acadia National Park

Acadia NP

Established in 1916, the 47,000 acre Acadia National Park protects and conserves outstanding scenic, natural, and cultural resources. Natural resources are comprised of a glaciated island landscape in addition to a biological diversity encompassing the transition zones between southern deciduous and northern coniferous forests. Additional resources include old-growth forests, sub-alpine communities, heaths, meadows, marshes, and a diverse flora and fauna.

Boston Harbor Islands NPA

Established in 1996, the Boston Harbor Islands National Park Area is a park like no other. The park consists of 34 islands and former islands that range in size from less than 1 acre to 214 acres over 50 square miles of Boston Harbor. Geologically unique, the Boston Harbor Islands are part of the only drumlin field to intersect a coastline in the United States. They have a humid maritime climate characterized by woodlands, shrublands, dunes, tidal flats, freshwater and saltwater marshes, and cultural resources.

Marsh-Billings-Rockefeller NHP

In 1992, Marsh-Billings-Rockefeller NHP became the first in the national park system to focus on the theme of conservation history and the changing nature of land stewardship in America. Opening to the public in 1998, the 550 acre park represents one of the earliest examples in the United States of active refo-

estation efforts. The park includes northern hardwoods, conifer plantations, cliff/rocky outcrop communities, open fields, streams, pond, vernal pools, and seeps.

Minute Man NHP

Minute Man NHP was created in 1959 to consolidate, protect and preserve portions of the Lexington-Concord Battle Road in Concord, Lincoln, and Lexington, Massachusetts. Three units comprise the 967 acre park: Battle Road, Wayside, and North Bridge where the "shot heard around the world" opened the American Revolution in 1775. The park contains upland forests, agricultural fields, and wetlands on flat plains and low-rolling hills. It lies along the watershed boundaries of the Concord River flowing north, the Shawsheen River flowing south, and the Charles River flowing east.



North Bridge at Minute Man NHP

Morristown NHP

In 1933, Morristown NHP received its status as the first national historic park. This area was occupied by General George Washington and the Continental Army during the Revolutionary War in the winter of 1779-1780. The 1,685 acre park occupies 4 separate geographical units and is comprised of mowed fields, orchards, planted gardens, and forest stands. It is located just 30 miles west of New York City. The effects of residential and commercial development of the surrounding area has changed its character dramatically.

natural resources in historical settings.

Roosevelt - Vanderbilt NHS

The Roosevelt - Vanderbilt NHS in Hyde Park, New York encompasses three different houses: the Vanderbilt Mansion, Franklin D.

Roosevelt's house, and Eleanor Roosevelt's house. They were established in 1940, 1945, and 1977, respectively, and combined, equal 775 acres. The three properties are primarily forested with second-growth hardwood stands and include almost 30% wetlands as well as numerous rock outcrops. Located along the eastern shore of the Hudson River, Roosevelt - Vanderbilt maintains a population of the state threatened Blanding's Turtle.

Saint-Gaudens NHS

Saint-Gaudens NHS was established in 1964 and consists of 148 acres, including the home, studios, and gardens of Augustus Saint Gaudens, the foremost American sculptor of the late nineteenth century. The site is located in the Connecticut River Valley which is characterized by its terraced slopes created by glacial activity. A majority of its acreage is on the lower slopes next to the river bottom and

is covered with a coniferous and mixed deciduous forest. There are also fresh water resources in the park including brooks, ponds, and wetlands.

Saugus Iron Works NHS

Saugus Iron Works was created as a national historic site in 1968 and is located on the Saugus River in Saugus, Massachusetts. Saugus Iron Works is the location of the first successful industrial facility for the integrated production of cast and wrought iron in North America. This site is comprised of a tidal marsh, riparian woodlands, and a portion of the Saugus River.

Saratoga NHP

Saratoga NHP was designated in 1938 to preserve and protect the battlefield and sites associated with the 1777 surrender of British forces at Saratoga. This battle was the first significant military victory during the War for Independence, and is one of the top fifteen ranked decisive battles in world history. Mixed and deciduous forests dominate the

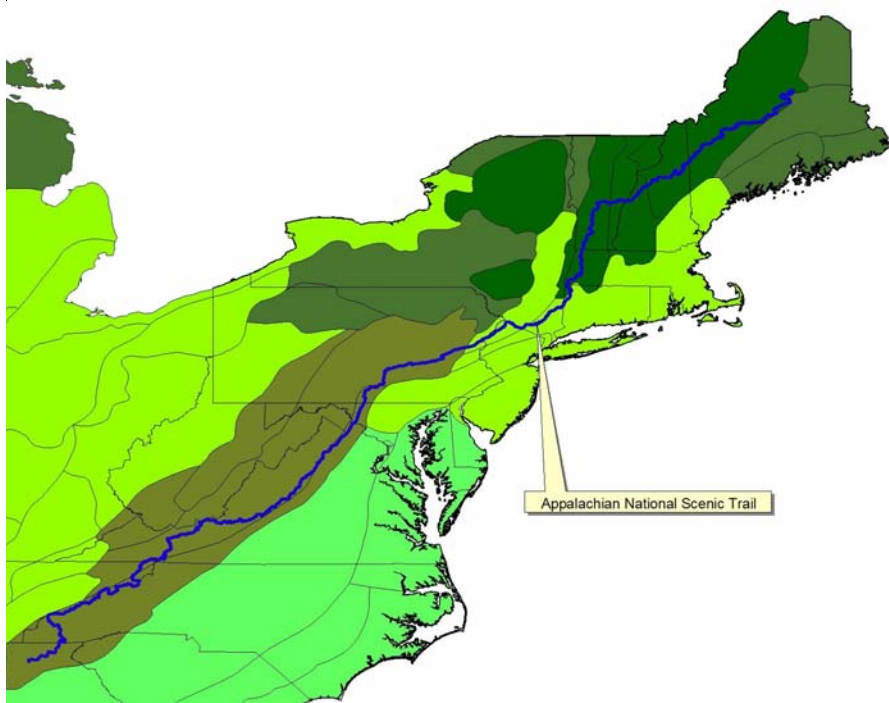
park landscape, while grasslands maintain the largest number of species.

Weir Farm NHS

Weir Farm NHS was home to nineteenth century American Impressionist Julian Alden Weir. It was established as a national historic site in 1990 to preserve one of the last intact landscapes associated with American Impressionism and to maintain the integrity of an area that inspired artistic expression. The park contains a number of wetland complexes, old fields, and deciduous forests as significant parts of the landscape. In addition, the Weir Pond, created in 1896, is an important natural and cultural resource.



Weir Farm NHS



The Appalachian Trail

In 1968 the Appalachian Trail was established as the first national scenic trail. It is approximately 2,160 miles long and extends from Springer Mountain, Georgia to Mount Katahdin, Maine. It is administered cooperatively by the Park Service and 105 agencies and organizations. The trail traverses several ecoregions within the Northeast Temperate Network on a wide latitudinal and elevational gradient ranging from wetlands to alpine ecological communities. The trail, in its entirety, traverses four other Inventory and Monitoring Networks: the Appalachian Highlands, Mid Atlantic, Eastern Rivers and Mountains, and the National Capital Region.



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-  Eastern Broadleaf Forest Province
-  Central Appalachian Broadleaf Forest Province

The Northeast Temperate Network

